

Department of Energy

§ 960.3-2-1

Sites with predicted isolation capabilities that differ by less than a factor of 10, with similar uncertainties, may be assumed to provide equivalent isolation.

[66 FR 57334, Nov. 14, 2001]

§ 960.3-2 Siting process.

The siting process begins with site screening for the identification of potentially acceptable sites. This process was completed for purposes of the first repository before the enactment of the Act, and the identification of such sites was made after enactment in accordance with the provisions of section 116(a) of the Act. The screening process for the identification of potentially acceptable sites for the second and subsequent repositories shall be conducted in accordance with the requirements specified in § 960.3-2-1 of this subpart. The nomination of any site as suitable for characterization shall follow the process specified in § 960.3-2-2, and such nomination shall be accompanied by an environmental assessment as specified in section 112(b)(1)(E) of the Act. The recommendation of sites as candidate sites for characterization shall be accomplished in accordance with the requirements specified in § 960.3-2-3.

[49 FR 47752, Dec. 6, 1984, as amended at 66 FR 57335, Nov. 14, 2001]

§ 960.3-2-1 Site screening for potentially acceptable sites.

To identify potentially acceptable sites for the development of other than the first repository, the process shall begin with site-screening activities that consider large land masses that contain rock formations of suitable depth, thickness, and lateral extent and have structural, hydrologic, and tectonic features favorable for waste containment and isolation. Within those large land masses, subsequent site-screening activities shall focus on successively smaller and increasingly more suitable land units. This process shall be developed in consultation with the States that contain land units under consideration. It shall be implemented in a sequence of steps that first applies the applicable disqualifying conditions to eliminate land units on the basis of the evidence specified in

§ 960.3-1-4-1 and in accordance with the application requirements set forth in appendix III of this part. After the disqualifying conditions have been applied, the favorable and potentially adverse conditions, as identified for each remaining land unit, shall be evaluated. The presence of favorable conditions shall favor a given land unit, while the presence of potentially adverse conditions shall penalize that land unit. Recognizing that favorable conditions and potentially adverse conditions for different technical guidelines can exist in the same land unit, the DOE shall seek to evaluate the composite favorability of each land unit. Land units that, in the aggregate, exhibit potentially adverse conditions shall be deferred in favor of land units that exhibit favorable conditions. The siting provisions that require diversity of geohydrologic settings and rock types and consideration of regionality, as specified in §§ 960.3-1-1, 960.3-1-2, and 960.3-1-3, respectively, may be used to discriminate between land units and to establish the range of options in site screening. To identify a site as potentially acceptable, the evidence shall support a finding that the site is not disqualified in accordance with the application requirements set forth in appendix III of this part and shall support the decision by the DOE to proceed the continued investigation of the site on the basis of the favorable and potentially adverse conditions identified to date. In continuation of the screening process after such identification and before site nomination, the DOE may defer from further consideration land units or potentially acceptable sites or portions thereof on the basis of additional information or by the application of the siting provisions for diversity of geohydrologic settings, diversity of rock types, and regionality (§§ 960.3-1-1, 960.3-1-2, and 960.3-1-3, respectively). The deferral of potentially acceptable sites will be described in the environmental assessments that accompany the nomination of at least five sites as suitable for characterization. In order to identify potentially acceptable sites for the second and subsequent repositories, the Secretary shall *first* identify the State

within which the site is located in a decision-basis document that describes the process and the considerations that led to the identification of such site and that has been issued previously in draft for review and comment by such State. *Second*, when such document is final, the Secretary shall notify the Governor and the legislature of that State and the tribal council of any affected Indian tribe of the potentially acceptable site.

§ 960.3-2-2 Nomination of sites as suitable for characterization.

From the sites identified as potentially acceptable, the Secretary shall nominate at least five sites determined suitable for site characterization for the selection of each repository site. For the second repository, at least three of the sites shall not have been nominated previously. Any site nominated as suitable for characterization for the first repository, but not recommended as a candidate site for characterization, may not be nominated as suitable for characterization for the second repository. The nomination of a site as suitable for characterization shall be accompanied by an environmental assessment as specified in section 112(b)(1)(E) of the Act. Such nomination shall be based on evaluations in accordance with the guidelines of this part, and the bases and relevant details of those evaluations and of the decision processes involved therein shall be contained in the environmental assessment for the site in the manner specified in this subpart. The evidence required to support such evaluations and siting decisions is specified in § 960.3-1-4-2.

§ 960.3-2-2-1 Evaluation of all potentially acceptable sites.

First, in considering sites for nomination, each of the potentially acceptable sites shall be evaluated on the basis of the disqualifying conditions specified in the technical guidelines of subparts C and D, in accordance with the application requirements set forth in appendix III of this part. This evaluation shall support a finding by the DOE that such sites is not disqualified.

§ 960.3-2-2-2 Selection of sites within geohydrologic settings.

Second, the siting provision requiring diversity of geohydrologic settings, as specified in § 960.3-1-1, shall be applied to group all potentially acceptable sites according to their geohydrologic settings. *Third*, for those geohydrologic settings that contain more than one potentially acceptable site, the preferred site shall be selected on the basis of a comparative evaluation of all potentially acceptable sites in that setting. This evaluation shall consider the distinguishing characteristics displayed by the potentially acceptable sites within the setting and the related guidelines from subparts C and D. That is, the appropriate guidelines shall be selected primarily on the basis of the kinds of evidence among sites for which distinguishing characteristics can be identified. Such comparative evaluation shall be made on the basis of the qualifying conditions for those guidelines, considering, on balance, the favorable conditions and potentially adverse conditions identified at each site. Due consideration shall also be given to the siting provisions specifying the basis for site evaluations in § 960.3-1-5, to the extent practicable, and diversity of rock types in § 960.3-1-2, if the circumstances so apply. If less than five geohydrologic settings are available for consideration, the above process shall be used to select two or more preferred sites from those settings that contain more than one potentially acceptable site, as required to obtain the number of sites to be nominated as suitable for characterization. For purposes of the second and subsequent repositories, due consideration shall also be given to the siting provision for regionality as specified in § 960.3-1-3. *Fourth*, each preferred site within a geohydrologic setting shall be evaluated as to whether such site is suitable for the development of a repository under the qualifying condition of each guideline specified in subparts C and D that does not require site characterization as a prerequisite for the application of such guideline. The guidelines considered appropriate to this evaluation have been selected on the basis of their exclusion under the definition of site characterization as